

OIPF

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/628,112
DATE: 08/10/2000
TIME: 15:33:16Input Set : A:\JH01120-11.TXT
Output Set : N:\CRF3\08102000\I628112.raw

4 <110> APPLICANT: Lee, Se-Jin
5 McPherron, Alexandra C.
7 <120> TITLE OF INVENTION: PROMYOSTATIN PEPTIDES AND METHODS OF
8 USING SAME
10 <130> FILE REFERENCE: JH01120-11
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/628,112
C--> 12 <141> CURRENT FILING DATE: 2000-07-27
12 <150> PRIOR APPLICATION NUMBER: 09/124,180
13 <151> PRIOR FILING DATE: 1998-07-28
15 <150> PRIOR APPLICATION NUMBER: 09/019,070
16 <151> PRIOR FILING DATE: 1998-02-05
18 <150> PRIOR APPLICATION NUMBER: 08/862,445
19 <151> PRIOR FILING DATE: 1997-05-23
21 <150> PRIOR APPLICATION NUMBER: 08/847,910
22 <151> PRIOR FILING DATE: 1997-04-28
24 <150> PRIOR APPLICATION NUMBER: 08/795,071
25 <151> PRIOR FILING DATE: 1997-02-05
27 <150> PRIOR APPLICATION NUMBER: 08/525,596
28 <151> PRIOR FILING DATE: 1995-10-26
30 <160> NUMBER OF SEQ ID NOS: 29
32 <170> SOFTWARE: FastSEQ for Windows Version 4.0
34 <210> SEQ ID NO: 1
35 <211> LENGTH: 2743
36 <212> TYPE: DNA
37 <213> ORGANISM: Homo sapiens
39 <220> FEATURE:
40 <221> NAME/KEY: CDS
41 <222> LOCATION: (59)...(1183)
43 <400> SEQUENCE: 1
44 aagaaaagta aaaggaagaa acaagaacaa gaaaaaagat tatattgatt ttaaaatc 58
45 atg caa aaa ctg caa ctc tgt gtt tat att tac ctg ttt atg ctg att 106
46 Met Gln Lys Leu Gln Leu Cys Val Tyr Ile Tyr Leu Phe Met Leu Ile
47 1 5 10 15
49 gtt gct ggt cca gtg gat cta aat gag aac agt gag caa aaa gaa aat 154
50 Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
51 20 25 30
53 gtg gaa aaa gag ggg ctg tgt aat gca tgt act tgg aga caa aac act 202
54 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
55 35 40 45
57 aaa tct tca aga ata gaa gcc att aag ata caa atc ctc agt aaa ctt 250
58 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
59 50 55 60
61 cgt ctg gaa aca gct cct aac atc agc aaa gat gtt ata aga caa ctt 298
62 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Val Ile Arg Gln Leu
63 65 70 75 80
65 tta ccc aaa gct cct cca ctc cgg gaa ctg att gat cag tat gat gtc 346
66 Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val

ENTERED

RAW SEQUENCE LISTING

DATE: 08/10/2000

PATENT APPLICATION: US/09/628,112

TIME: 15:33:16

Input Set : A:\JHU1120-11.TXT

Output Set: N:\CRF3\08102000\I628112.raw

67	85	90	95	
69	cag agg gat gac agc agc gat ggc tct ttg gaa gat gac gat tat cac	394		
70	Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His			
71	100 105 110			
73	gct aca acg gaa aca atc att acc atg cct aca gag tct gat ttt cta	442		
74	Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu			
75	115 120 125			
77	atg caa gtg gat gga aaa ccc aaa tgt tgc ttc ttt aaa ttt agc tct	490		
78	Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser			
79	130 135 140			
81	aaa ata caa tac aat aaa gta gta aag gcc caa cta tgg ata tat ttg	538		
82	Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu			
83	145 150 155 160			
85	aga ccc gtc gag act cct aca aca gtg ttt gtg caa atc ctg aga ctc	586		
86	Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu			
87	165 170 175			
89	atc aaa cct atg aaa gac ggt aca agg tat act gga atc cga tct ctg	634		
90	Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu			
91	180 185 190			
93	aaa ctt gac atg aac cca ggc act ggt att tgg cag agc att gat gtg	682		
94	Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val			
95	195 200 205			
97	aag aca gtg ttg caa aat tgg ctc aaa caa cct gaa tcc aac tta ggc	730		
98	Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly			
99	210 215 220			
101	att gaa ata aaa gct tta gat gag aat ggt cat gat ctt gct gta acc	778		
102	Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr			
103	225 230 235 240			
105	ttc cca gga cca gga gaa gat ggg ctg aat ccg ttt tta gag gtc aag	826		
106	Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys			
107	245 250 255			
109	gta aca gac aca cca aaa aga tcc aga agg gat ttt ggt ctt gac tgt	874		
110	Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys			
111	260 265 270			
113	gat gag cac tca aca gaa tca cga tgc tgt cgt tac cct cta act gtg	922		
114	Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val			
115	275 280 285			
117	gat ttt gaa gct ttt gga tgg gat tgg att atc gct cct aaa aga tat	970		
118	Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr			
119	290 295 300			
121	aag gcc aat tac tgc tct gga gag tgt gaa ttt gta ttt tta caa aaa	1018		
122	Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys			
123	305 310 315 320			
125	tat cct cat act cat ctg gta cac caa gca aac ccc aga ggt tca gca	1066		
126	Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala			
127	325 330 335			
129	ggc cct tgc tgt act ccc aca aag atg tct cca att aat atg cta tat	1114		
130	Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr			
131	340 345 350			

RAW SEQUENCE LISTING DATE: 08/10/2000
 PATENT APPLICATION: US/09/628,112 TIME: 15:33:16

Input Set : A:\JHU1120-11.TXT
 Output Set: N:\CRF3\08102000\I628112.raw

```

133 ttt aat ggc aaa gaa caa ata ata tat ggg aaa att cca gcg atg gta      1162
134 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
135          355          360          365
137 gta gac cgc tgt ggg tgc tca tgagatttat attaagcgtt cataacttcc      1213
138 Val Asp Arg Cys Gly Cys Ser
139          370          375
141 taaaacatgg aaggtttttcc cctcaacaat tttgaagctg tgaaattaag taccacaggc      1273
142 tataggccta gagtatgcta cagtcaactta agcataagct acagtatgta aactaaaagg      1333
143 gggaaatata gcaatgggtg gcatttaacc atccaaacaa atcatacaag aaagttttat      1393
144 gatttccaga gtttttgagc tagaaggaga tcaaattaca tttatgttcc tatatatattac      1453
145 aacatcggcg aggaaatgaa agcgattctc cttgagttct gatgaattaa aggagtatgc      1513
146 tttaaagtct atttctttta agttttgttt aatattttaca gaaaaatcca catcacagtat      1573
147 tggtaaaatg caggattgtt atataccatc attcgaatca tccttaaaaca cttgaattta      1633
148 tattgtatgg tagtatactt ggtaagataa aattccacaa aaatagggat ggtgcagcat      1693
149 atgcaatttc cattcctatt ataattgaca cagtacatta acaatccatg ccaacgggtgc      1753
150 taatacgata ggctgaatgt ctgaggctac caggtttatc acataaaaaa cattcagtaa      1813
151 aatagtaagt ttctcttttc ttcaggtgca ttttcttaca cctccaaatg aggaatggat      1873
152 tttcttttaat gtaagaagaa tcatttttct agaggtttgc tttcaattct gtagcatact      1933
153 tggagaaact gcattatctt aaaaggcagt caaatgggtg ttgtttttat caaaatgtca      1993
154 aaataacata ctgggagaag tatgtaattt tgtctttgga aaattacaac actgcctttg      2053
155 caacactgca gtttttatgg taaaaataa gaaatgatcg actctatcaa tattgtataa      2113
156 aaagactgaa acaatgcatt tatataatat gtatacaata ttgtttttgta aataagtgtc      2173
157 tcctttttta ttacttttgg tatattttta cactaaggac atttcaaat aagtactaag      2233
158 gcacaaagac atgtcatgca tcacagaaaa gcaactactt atatttcaga gcaaattagc      2293
159 agattaaata gtggtcttaa aactccatat gttaatgatt agatggttat attacaatca      2353
160 ttttatattt ttttacatga ttaacattca cttatggatt catgatggct gtataaagtg      2413
161 aatttgaaat ttcaatgggt tactgtcatt gtgttttaaa ctcaacgttc cattatttta      2473
162 atacttgcaa aaacattact aagtatacca aaataattga ctctattatc tgaaatgaag      2533
163 aataaactga tgctatctca acaataactg ttacttttat tttataattt gataatgaat      2593
164 atatttctgc atttttttac ttctgttttg taaattggga ttttgttaat caaattttatt      2653
165 gtactatgac taaatgaaat tatttcttac atctaatttg tagaaacagt ataagttata      2713
166 ttaaagtgtt ttcacatttt tttgaaagac
168 <210> SEQ ID NO: 2
169 <211> LENGTH: 375
170 <212> TYPE: PRT
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 2
174 Met Gln Lys Leu Gln Leu Cys Val Tyr Ile Tyr Leu Phe Met Leu Ile
175 1 5 10 15
176 Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
177 20 25 30
178 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
179 35 40 45
180 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
181 50 55 60
182 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Val Ile Arg Gln Leu
183 65 70 75 80
184 Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val
185 85 90 95

```

RAW SEQUENCE LISTING DATE: 08/10/2000
 PATENT APPLICATION: US/09/628,112 TIME: 15:33:16

Input Set : A:\JHUI120-11.TXT
 Output Set: N:\CRF3\08102000\I628112.raw

```

186 Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
187           100           105           110
188 Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
189           115           120           125
190 Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
191           130           135           140
192 Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
193 145           150           155           160
194 Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
195           165           170           175
196 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
197           180           185           190
198 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
199           195           200           205
200 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
201           210           215           220
202 Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr
203 225           230           235           240
204 Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys
205           245           250           255
206 Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
207           260           265           270
208 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
209           275           280           285
210 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
211           290           295           300
212 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
213 305           310           315           320
214 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
215           325           330           335
216 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
217           340           345           350
218 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
219           355           360           365
220 Val Asp Arg Cys Gly Cys Ser
221           370           375
223 <210> SEQ ID NO: 3
224 <211> LENGTH: 2676
225 <212> TYPE: DNA
226 <213> ORGANISM: Mus musculus
228 <220> FEATURE:
229 <221> NAME/KEY: CDS
230 <222> LOCATION: (104)...(1231)
232 <400> SEQUENCE: 3
233 gtctctcgga cggtagatgc actaatattt cacttggcat tactcaaaag caaaaagaag      60
234 aaataagaac aagggaaaaa aaaagattgt gctgattttt aaa atg atg caa aaa      115
235                               Met Met Gln Lys
236                               1
238 ctg caa atg tat gtt tat att tac ctg ttc atg ctg att gct gct ggc      163

```

RAW SEQUENCE LISTING

DATE: 08/10/2000

PATENT APPLICATION: US/09/628,112

TIME: 15:33:16

Input Set : A:\JHU1120-11.TXT

Output Set: N:\CRF3\08102000\I628112.raw

```

239 Leu Gln Met Tyr Val Tyr Ile Tyr Leu Phe Met Leu Ile Ala Ala Gly
240 5 10 15 20
242 cca gtg gat cta aat gag ggc agt gag aga gaa aat gtg gaa aaa 211
243 Pro Val Asp Leu Asn Glu Gly Ser Glu Arg Glu Glu Asn Val Glu Lys
244 25 30 35
246 gag ggg ctg tgt aat gca tgt gcg tgg aga caa aac acg agg tac tcc 259
247 Glu Gly Leu Cys Asn Ala Cys Ala Trp Arg Gln Asn Thr Arg Tyr Ser
248 40 45 50
250 aga ata gaa gcc ata aaa att caa atc ctc agt aag ctg cgc ctg gaa 307
251 Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu Arg Leu Glu
252 55 60 65
254 aca gct cct aac atc agc aaa gat gct ata aga caa ctt ctg cca aga 355
255 Thr Ala Pro Asn Ile Ser Lys Asp Ala Ile Arg Gln Leu Leu Pro Arg
256 70 75 80
258 gcg cct cca ctc cgg gaa ctg atc gat cag tac gac gtc cag agg gat 403
259 Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val Gln Arg Asp
260 85 90 95 100
262 gac agc agt gat ggc tct ttg gaa gat gac gat tat cac gct acc acg 451
263 Asp Ser Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His Ala Thr Thr
264 105 110 115
266 gaa aca atc att acc atg cct aca gag tct gac ttt cta atg caa gcg 499
267 Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu Met Gln Ala
268 120 125 130
270 gat ggc aag ccc aaa tgt tgc ttt ttt aaa ttt agc tct aaa ata cag 547
271 Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser Lys Ile Gln
272 135 140 145
274 tac aac aaa gta gta aaa gcc caa ctg tgg ata tat ctc aga ccc gtc 595
275 Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu Arg Pro Val
276 150 155 160
278 aag act cct aca aca gtg ttt gtg caa atc ctg aga ctc atc aaa ccc 643
279 Lys Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu Ile Lys Pro
280 165 170 175 180
282 atg aaa gac ggt aca agg tat act gga atc cga tct ctg aaa ctt gac 691
283 Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu Lys Leu Asp
284 185 190 195
286 atg agc cca ggc act ggt att tgg cag agt att gat gtg aag aca gtg 739
287 Met Ser Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val Lys Thr Val
288 200 205 210
290 ttg caa aat tgg ctc aaa cag cct gaa tcc aac tta ggc att gaa atc 787
291 Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly Ile Glu Ile
292 215 220 225
294 aaa gct ttg gat gag aat ggc cat gat ctt gct gta acc ttc cca gga 835
295 Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr Phe Pro Gly
296 230 235 240
298 cca gga gaa gat ggg ctg aat ccc ttt tta gaa gtc aag gtg aca gac 883
299 Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys Val Thr Asp
300 245 250 255 260
302 aca ccc aag agg tcc cgg aga gac ttt ggg ctt gac tgc gat gag cac 931
303 Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys Asp Glu His

```

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



VERIFICATION SUMMARY DATE: 08/10/2000
PATENT APPLICATION: US/09/628,112 TIME: 15:33:17

Input Set : A:\JHU1120-11.TXT
Output Set: N:\CRF3\08102000\I628112.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:1723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21